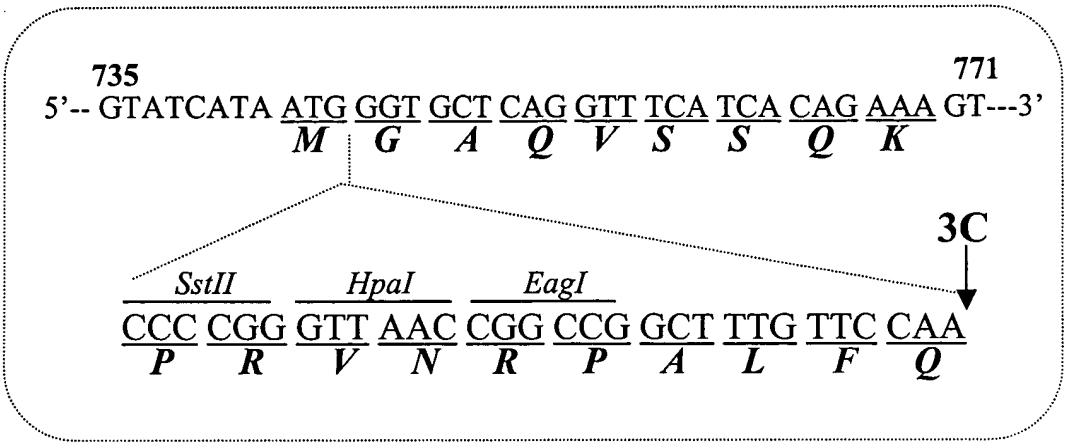
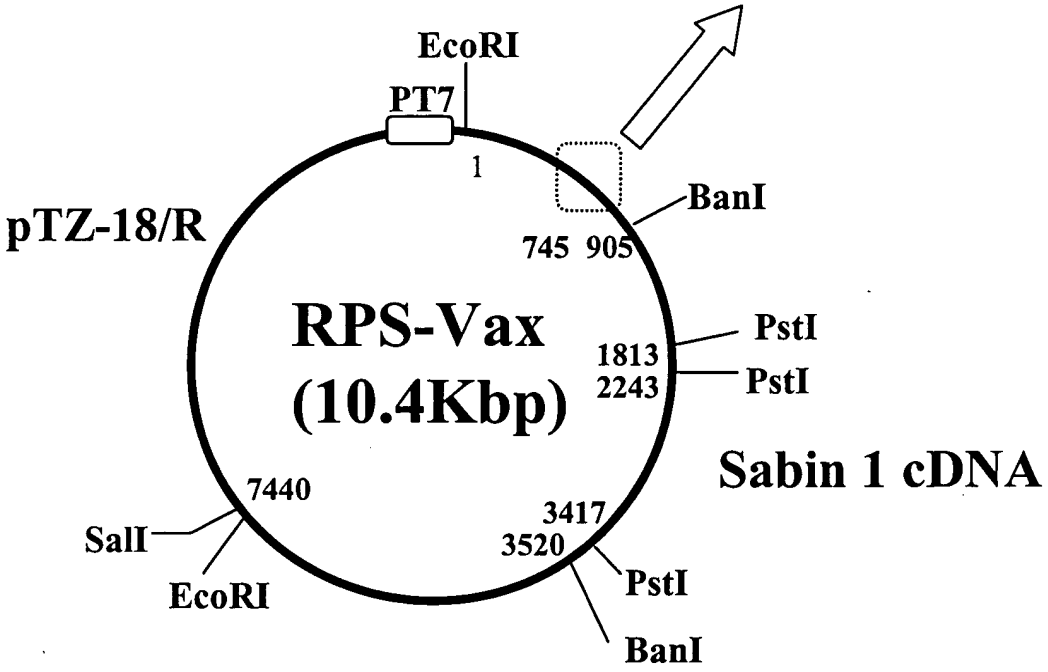
Fig. 1





Poliovirus Sabin 1 vector (RPS-Vax) system

Fig. 2

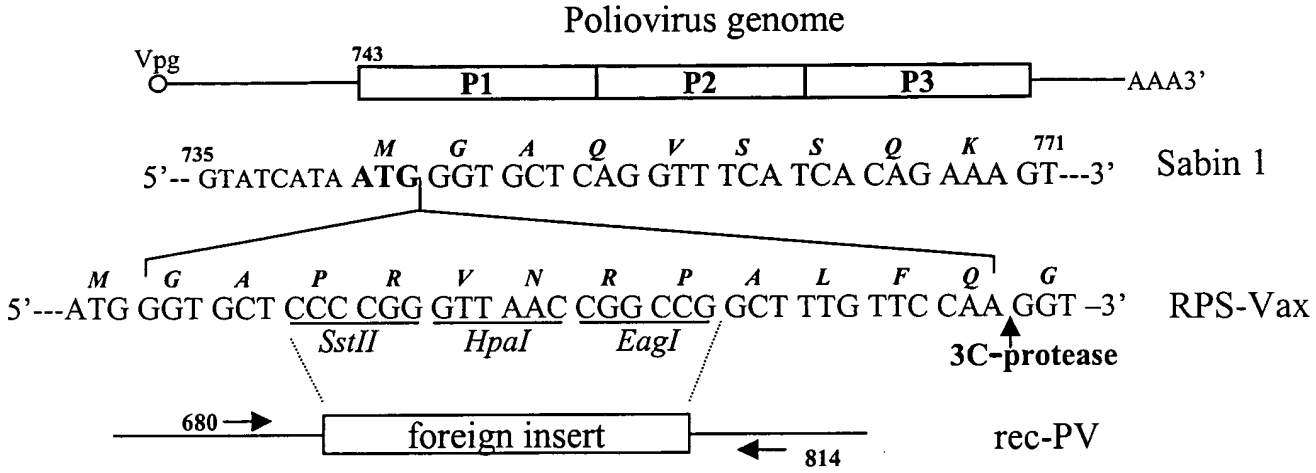
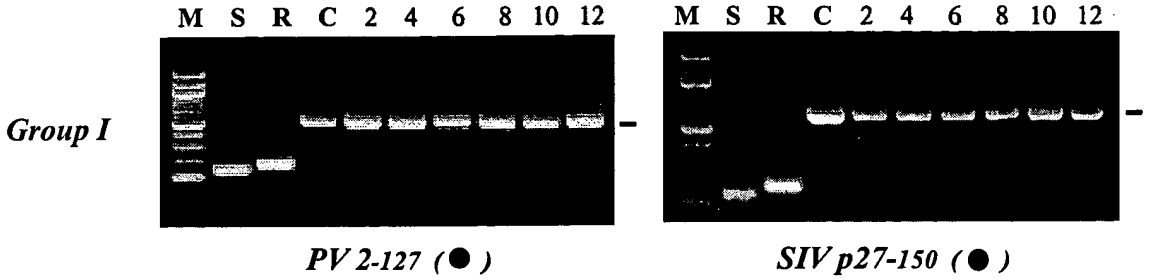
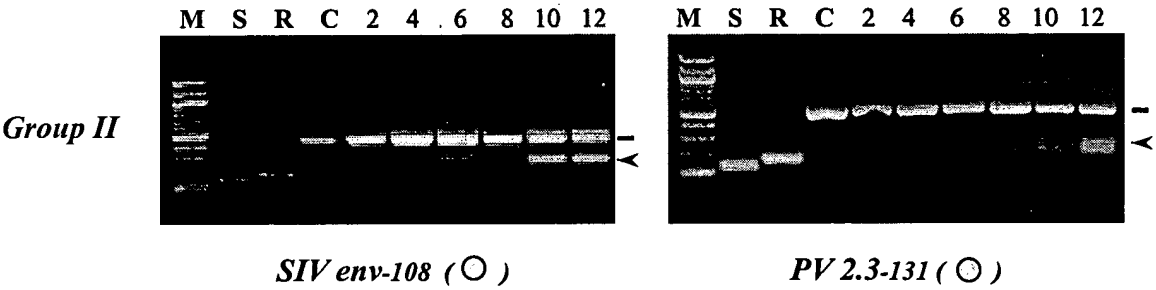

Poliovirus genome
Vpg
743
P1
P2
P3
AAA3'
735
M G A Q V S S Q K
771
5'-- GTATCATA ATG GGT GCT CAG GTT TCA TCA CAG AAA GT---3'
Sabin 1
M G A P R V N R P A L F Q G
5'---ATG GGT GCT CCC CGG GTT AAC CGG CCG GCT TTG TTC CAA GGT –3'
RPS-Vax
SstII
HpaI
EagI
3C-protease
680
foreign insert
814
rec-PV

Fig. 3a



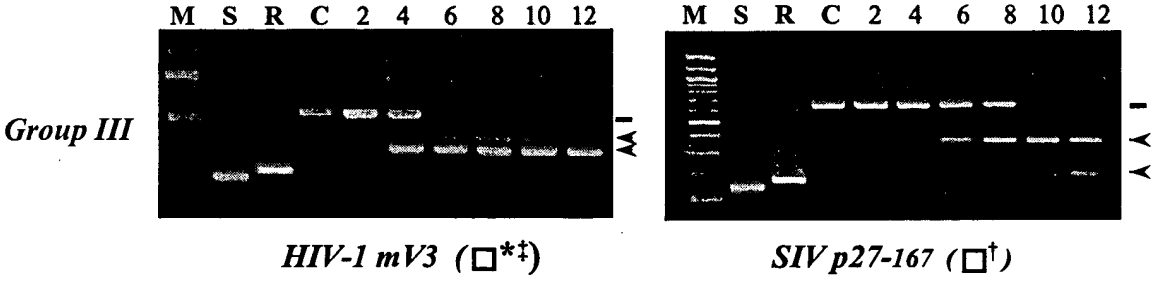
PV 2-127 (●) *SIV p27-150 (●)*

Fig. 3b



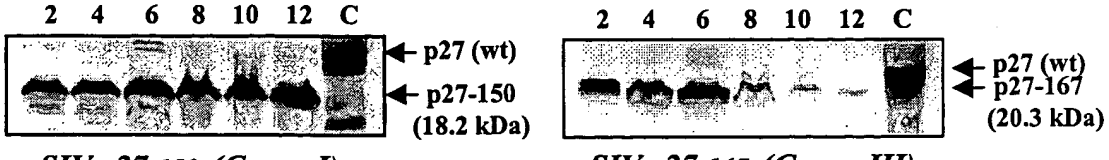
SIV env-108 (○) *PV 2.3-131 (○)*

Fig. 3c



HIV-1 mV3 (□‡)* *SIV p27-167 (□†)*

Fig. 3d



SIV p27-150 (Group I) *SIV p27-167 (Group III)*

Fig. 4

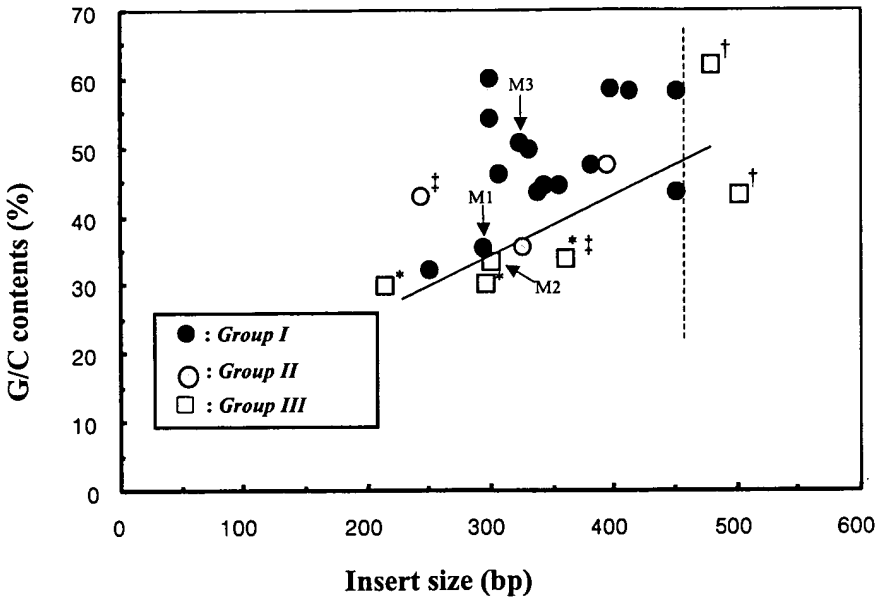

G/C contents (%)
Insert size (bp)
0
10
20
30
40
50
60
70
0
100
200
300
400
500
600
M1
M2
M3
● : Group I
○ : Group II
□ : Group III

Fig. 5a

SIV env-108 (G/C content, 35.4 %)

ACTTCTACTT GGTTTGGCTT TAATGGAACT AGAGCAGAAA ATAGAACTTA TATTTACTGG
AGC C C C G G C C C

CATGGTAGGG ATAATAGGAC TATAATTAGT TTAAATAAGT ATTATAATCT AACAATGAAA
C CC G C C CCG C C C C C C

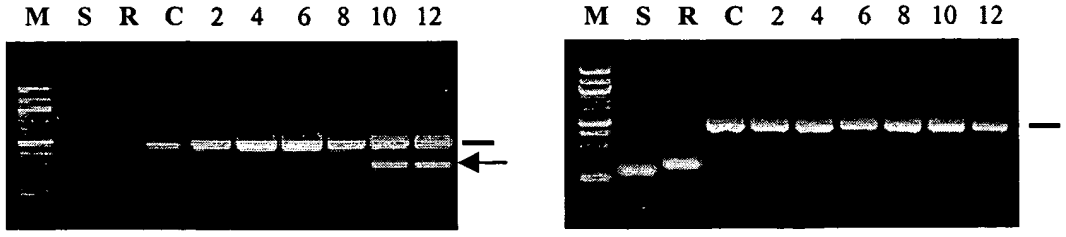
TGTAGAAGAC CAGGAAATAA GACAGTTTTA CCAGTCACCA TTATGTCTGG ATTGGTTTTC
C G GC C C G C

CACTCACAAC CAATCAATGA TAGGCCAAAG CAGGCATGGT GTTGGTTTGG AGGAAAATGG
G C C C C C C G

AAGGATGCAA TAAAAGAGGT GAAGCAGACC ATTGTCAAAC ATCCCAGGTA TACTGGAACT
C G G C

AACAATACTG ATAAAATCAA TTTG
C C G - SIV env-108/M (G/C content, 50.3%)

Fig. 5b



SIV env-108 (35.4%) *SIV env-108/M (50.3%)*

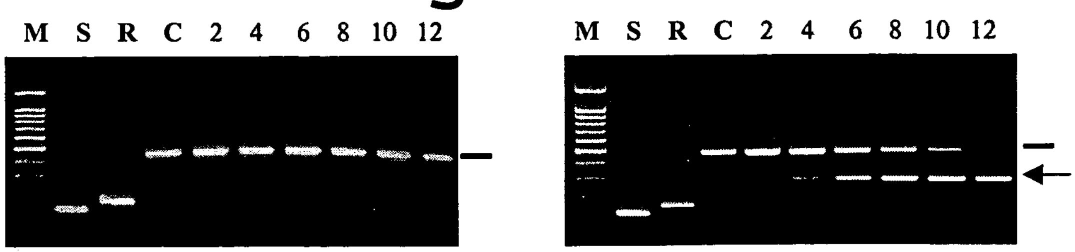
Fig. 5c

SIV gag-100 (G/C content, 45%)

```
AGCCCGAGAA CATTAAATGC CTGGGTAAAA TTGATAGAGG AAAAGAAATT TGGAGCAGAA
   T  A                    A              A       A        A

GTAGTGCCAG GATTTCAGGC ACTGTCAGAA GGTTGCACCC CCTATGACAT TAATCAGATG
       T               A    T  A              T   T   A      T          A

TTAAATTGTG TGGGAGACCA TCAAGCGGCT ATGCAGATTA TCAGAGATAT TATAAACGAG
                 A      T           A         A     A             T  A

GAGGCTGCAG ATTGGGACTT GCAGCACCCA CAACCAGCTC CACAACAAGG ACAACTTAGG
   A                   T   A   A   T                                 T  A  A

GAGCCGTCAG GATCAGATAT TGCAGGAACA ACTAGTTCAG TAGATGAACA AATCCAGTGG
   A  T                                                          T  A
```

- SIV gag-100/M (G/C content, 34%)

Fig. 5d



SIV gag-100 (45%) *SIV gag-100/ M (34%)*

Fig. 6a

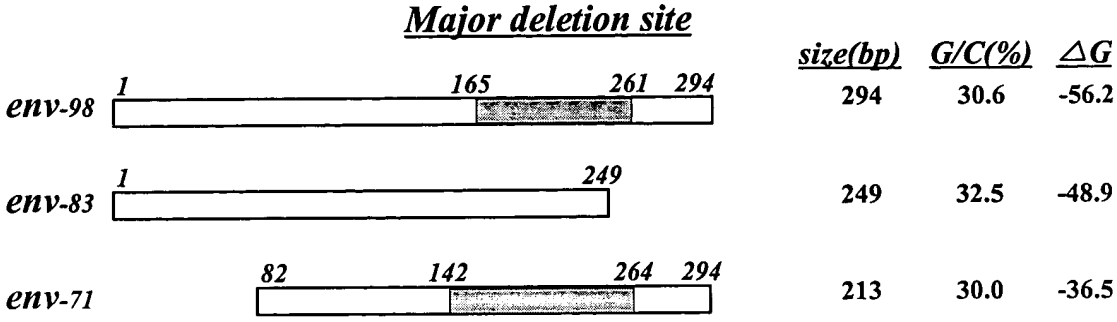

Major deletion site
size(bp)
G/C(%)
ΔG
env-98
1
165
261
294
294
30.6
-56.2
env-83
1
249
249
32.5
-48.9
env-71
82
142
264
294
213
30.0
-36.5

Fig. 6b

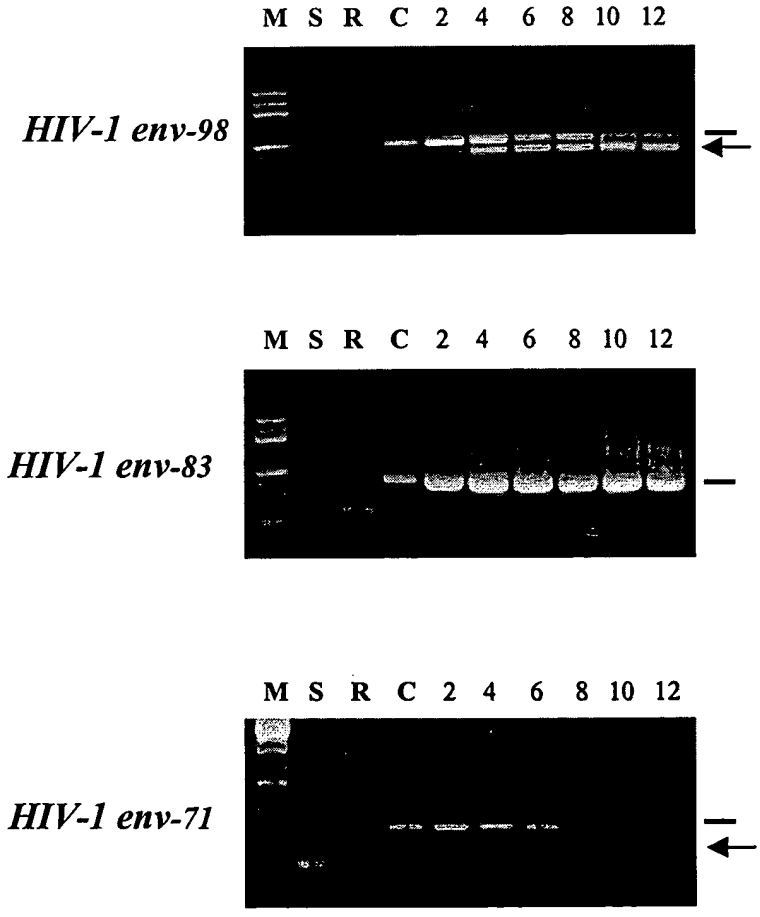

M S R C 2 4 6 8 10 12
HIV-1 env-98
M S R C 2 4 6 8 10 12
HIV-1 env-83
M S R C 2 4 6 8 10 12
HIV-1 env-71

Fig. 7a

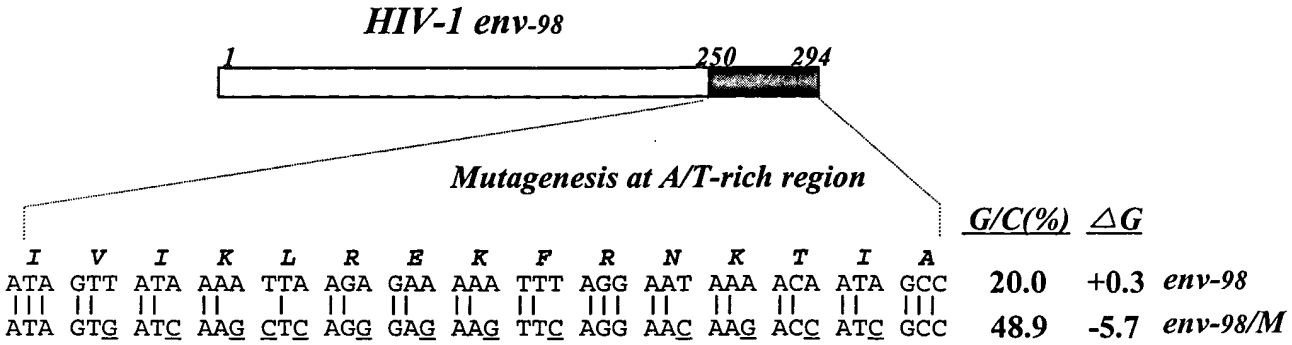


Fig. 7b

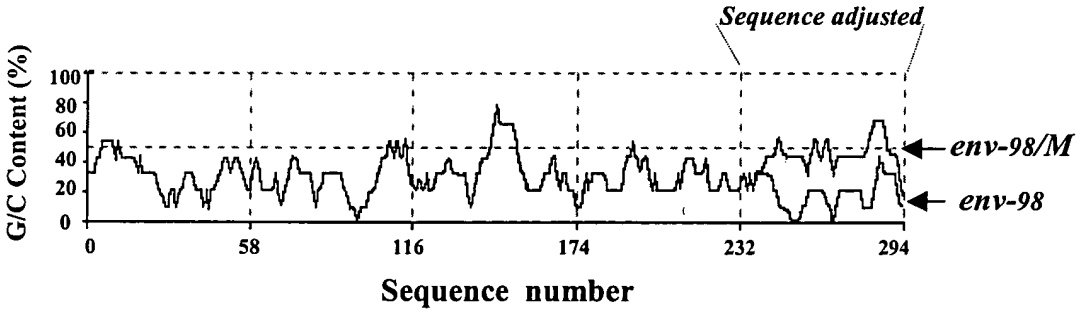
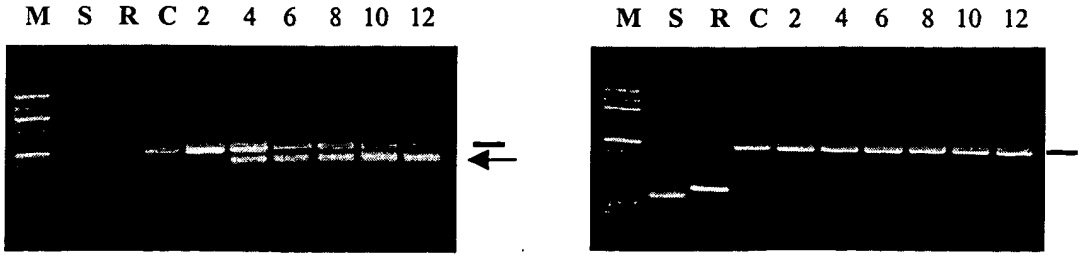
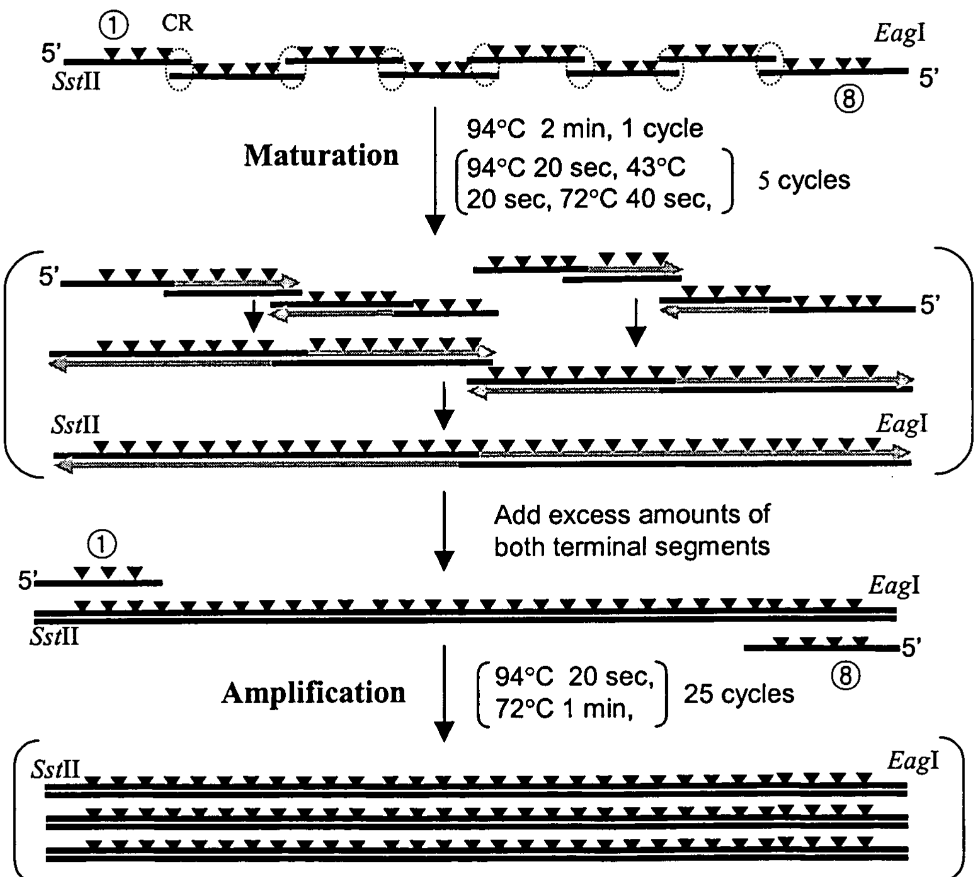


Fig. 7c



HIV-1 env -98 HIV-1 env -98/ M

Fig. 8



Sequence-adjusted full-length synthetic insert

Fig. 9

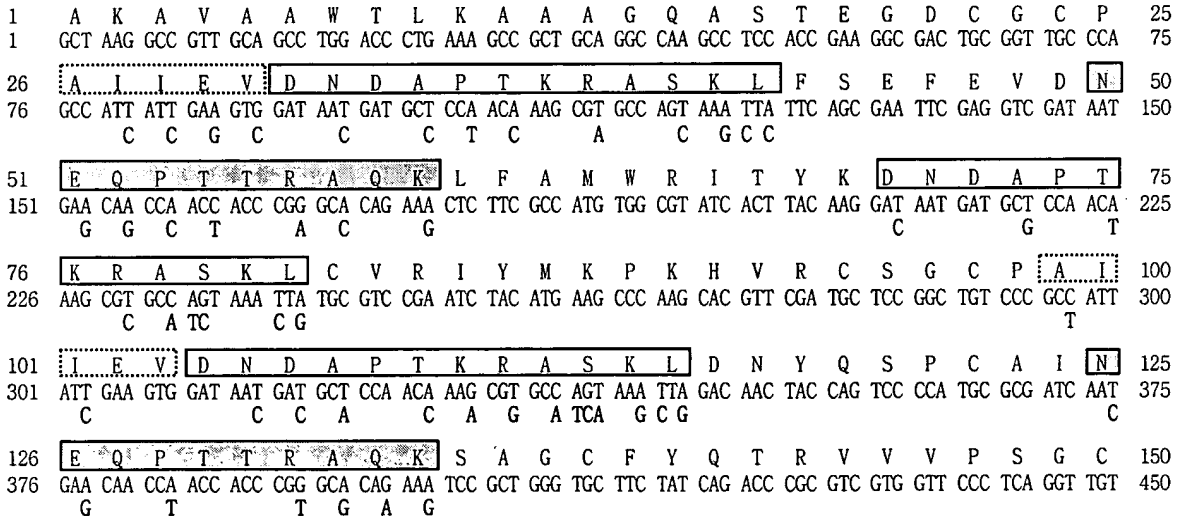


Fig. 10

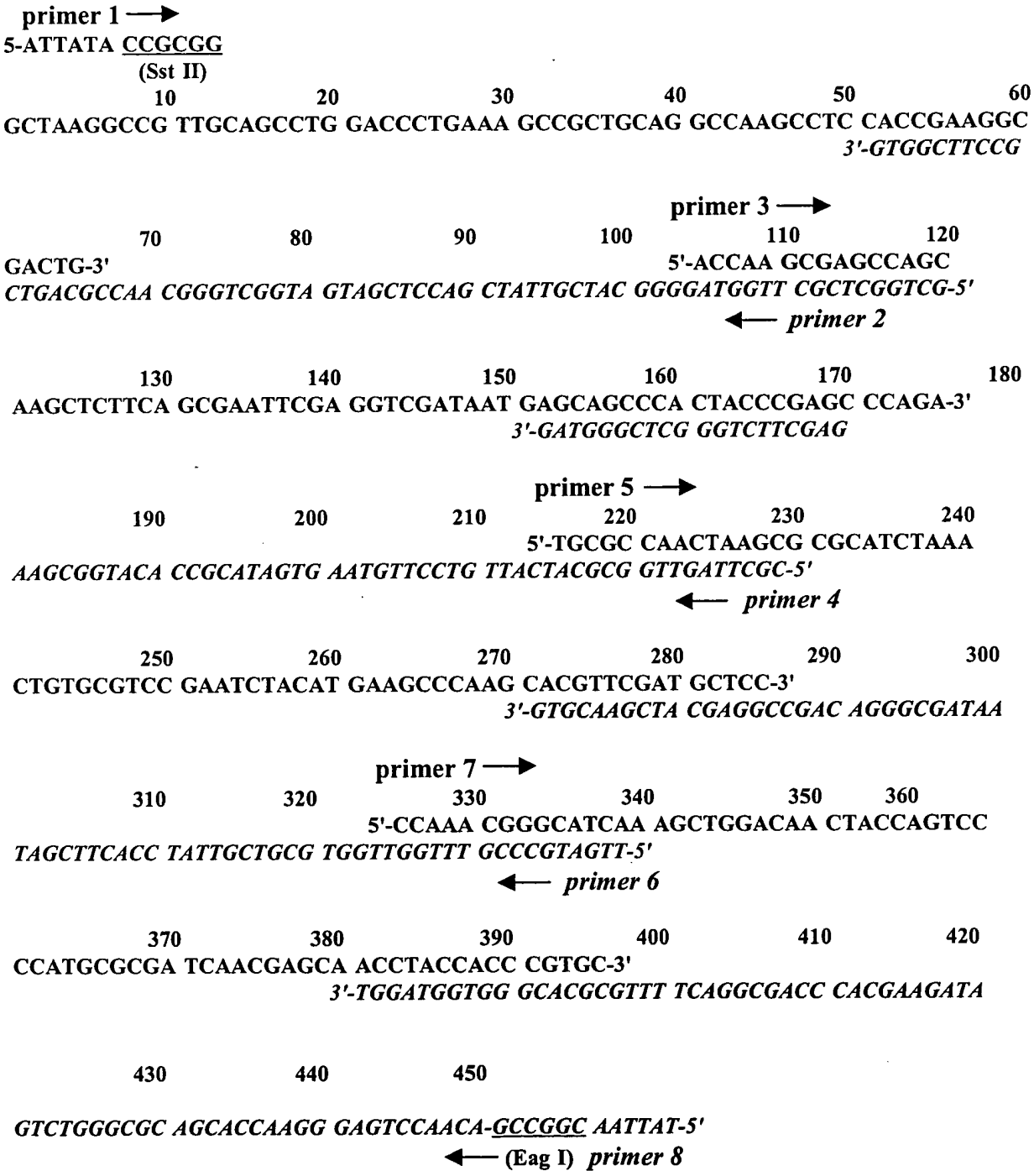


Fig. 11

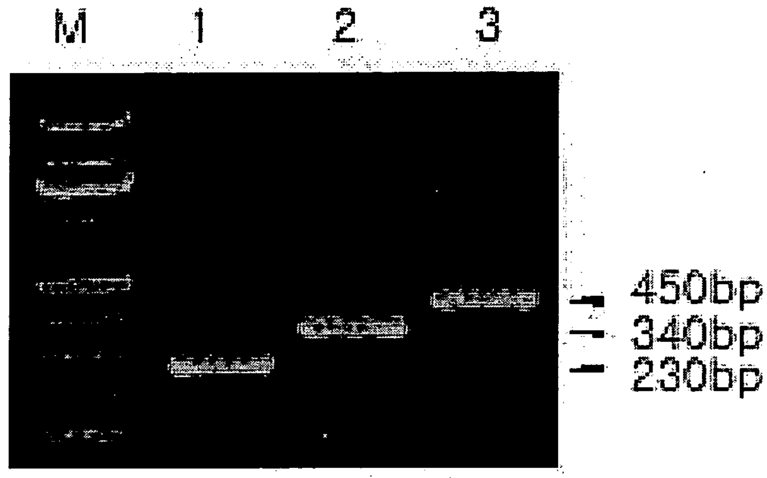
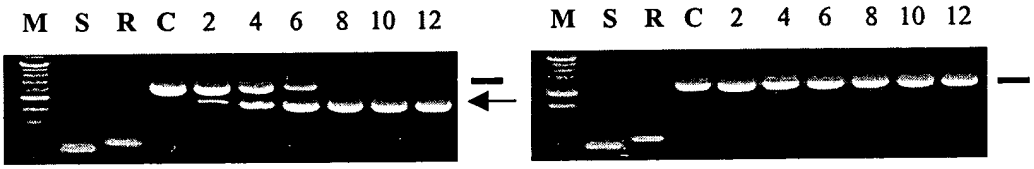


Fig. 12a



PVm-150 *PVm–150/M*

Fig. 12b

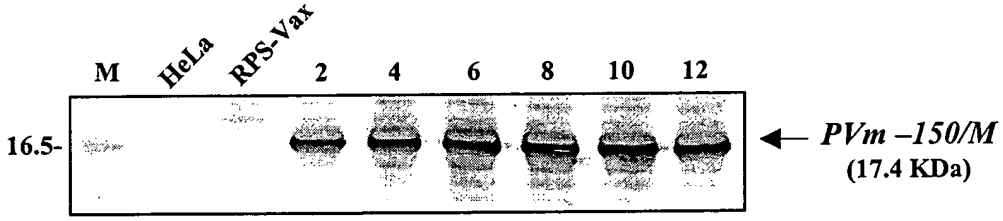
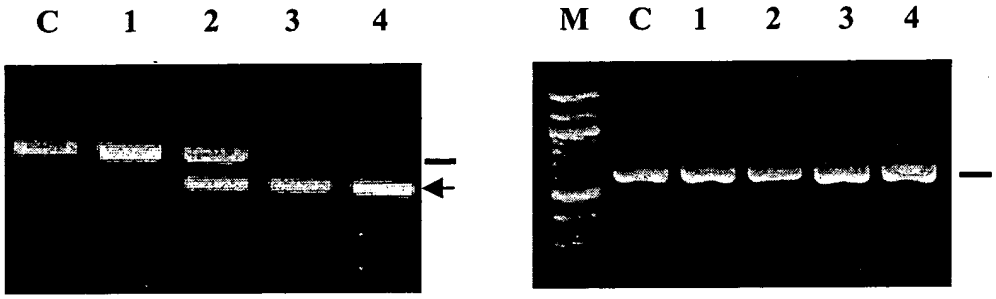


Fig. 13



PVm-150 *PVm-150/M*